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BEFORE THE ARIZONA CORPORATION COMMISSION

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DOCKET NO. W-01303A-09-0343

IN THE MATTER OF THE APPLICATION
OF ARIZONA-AMERICAN WATER
COMPANY, AN ARIZONA
CORPORATION, FOR A
DETERMINATION OF THE CURRENT
FAIR VALUE OF ITS UTILITY PLANT
AND PROPERTY AND FOR INCREASES
IN ITS RATES AND CHARGES BASED
THEREON FOR UTILITY SERVICE BY ITS
ANTHEM WATER DISTRICT AND ITS
SUN CITY WATER DISTRICT

IN THE MATTER OF THE APPLICATION
OF ARIZONA-AMERICAN WATER
COMPANY, AN ARIZONA
CORPORATION, FOR A
DETERMINATION OF THE CURRENT
FAIR VALUE OF ITS UTILITY PLANT
AND PROPERTY AND FOR INCREASES
IN ITS RATES AND CHARGES BASED
THEREON FOR UTILITY SERVICE BY ITS
ANTHEM/AGUA FRIA WASTEWATER
DISTRICT, ITS SUN CITY WASTEWATER
DISTRICT AND ITS SUN CITY WEST
WASTEWATER DISTRICT

DOCKET NO. SW-01303A-09-0343

CONSOLIDATION & RATE IMPACT

of

W.R. HANSEN

Individual Intervener

May 3, 2010

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1 **EXECUTIVE SUMMARY**

2 As per the charge of A.C.C. Chair Mayes, in a letter filed on 4/12/
3 08, in conjunction with Decision # 71410, wherein she asked partici-
4 pants in that case to, "...make an analysis addressing the predicted
5 impact of statewide & select...consolidation of the Company's water
6 districts and to propose combinations of districts where potential
7 benefits outweighs the limitations of consolidation efforts, and an
8 analysis of rates and operations under a statewide consolidation of
9 the Company's water districts."

10 This edict has triggered a plethora of exhaustive research on her
11 mandate, which, in this writer's view, does absolutely nothing to
12 enhance the radical direction in which consolidation would direct us.
13 It only reaffirms and substantiates some very fundamental and
14 adverse conclusions; (1) it plainly assists some districts in short
15 term strained circumstances at the expense of hurting others. This
16 was very clearly substantiated in Decision # 71410 when Arizona/
17 American executive Bröderick, on page 48 of that decision states, "...
18 he experimented with residential rate designs, but it did not change
19 his conclusions that in order to achieve a total rate consolidation,
20 the rates in Sun City & Mohave would increase significantly, (136% &
21 37.22%) and that the major short term beneficiaries would be Anthem
22 water (-47.74%) and Tubac (-47.13%) and Havasu (-42.90%) with the only
23 largely unaffected area being Paradise Valley." [emphasis added]
24 In that study, only one party supported the consolidation, the re-
25 presentative from Tubac, which district gained a 47.13 reduction vs.
26 an increased rate.

27 (2) the increase level of service is not guaranteed except where the
28 invested capital of one community is confiscated in order to enhance

1 the service level of another district. Meanwhile, the benefactor
2 district enjoys no gain in service level but is inflicted with a
3 higher rate which is extracted for the sole purpose of benefiting
4 another district. This takes on all the appearances of a collaborativ
5 utility rate payer welfare system.

6 (3) It incentivizes any inefficient or capital-troubled district to
7 to seek to join an existing consolidated amalgamation of water dis-
8 tricts for the purpose of transferring, and subsequently lessening
9 the burden of its rate payers while imposing an economic burden on
10 members of the consolidated group. Should consolidation be adopted,
11 it will precipitate a gravitation flow in this bail-out direction.

12 (4) It likewise incentivizes corporate bodies to troll for such
13 disadvantaged districts, as described in # 3 above, recognizing that
14 a utility commission that has initially embraced the rate payer
15 welfare system will subsequently welcome any troubled sojourner.

16 (5) The war-cry for consolidation is usually resonnated from the
17 electric & gas utility camps where "interconnection" is more plaus-
18 ible and economically rational. Water district are traditionally
19 independent. To pursue interconnection, as a service benefit, with-
20 in Arizona American could easily approximate over 892 miles of new
21 heavy piping making it an astronomical economic implausibility.

22 (6) As one reviews the Water Infrastructure Finance Authority of
23 Arizona's 2008 survey of the states 426 water districts and 133
24 wastewater districts, you can quickly focus on the extreme lack of
25 homogeneous characteristics among all these districts. They attempt
26 to categorize them into 32 types of structure and physical character-
27 istics with additional quantification. But one can easily compre-
28 hend the diversity of districts by reflecting upon the vast range

1 of rates among water dsitRICTS, running from \$4.64 monthly way up
2 to \$201.78 monthly. Among wastewater districts, they range from
3 \$2.00 to a high of \$80. monthly. This wide range of rates capitalizes
4 the obvious diversity of physical charactertics,needs and other
5 factors which drive the composition of a rate, proving once more
6 that consolidation is both implausible for water utilities, if not
7 detrimental.

8 (7) Finally, one could contend that consolidation would constitute
9 "discrimination" against a district adversely impacted in order to
10 benefit another district, which is contrary to the Arizona State
11 Constitution: Article 15, Section 12, which reads;
12 "All charges made for services rendered, or to be rendered,by public
13 service corporations within this state shall be just and reasonable,
14 and no discrimination in charges,service, or facilities shall be
15 made between persons or places for rendering a like and contempor-
16 aneous service,except that the granting of free or reduced tranpor-
17 tion may be authorized by law, or by the corporation commission,to
18 classess of persons described in the act of Congress approved
19 February 11,1887,entitled An Act To Regulate Commerce, and the
20 amendments thereto, as those to whom free or reduced rate transport-
21 ation may be granted." This bears study and will most assuredly
22 will be pursued.

23 Consolidation is fraught with so many adverse aspects in the water
24 utility field that it does not deserves adoption. It is a highly
25 controversial issue which will precipitate social unrest needlessly.

26

27

28

1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND TELEPHONE**
3 **NUMBER.**

4 My Name is W.R. Hansen. MY residential address is 12302
5 Swallow Dr., Sun City West, Arizona 85375, and my phone number
6 623-556-9873.

7 **Q. WHAT IS YOUR CURRENT STATUS?**

8 I am a retired individual.

9 **Q. PLEASE DESCRIBE YOUR VOCATIONAL EXPERIENCE & EDUCATION.**

10 I have a Bachelor Degree in Education with a Minor in Business
11 Administration with some additional post graduate education.
12 For 26 years I was a business co-owner with my brother, 15 years
13 in Trade Association management. During my business career, I
14 also spent 12 years in the Iowa STATE Legislature. Following
15 my association work, I spent 6 years on an appointive state
16 commission, serving half of that time as Chairman of the Commission

17 **Q. HAVE YOU TESTIFIED BEFORE THIS COMMISSION ?**

18 Yes, but it was at a Public Hearing they held in Sun City West.
19 However, I was deeply involved in the Rate Hearing last fall &
20 attended some of the formal hearings last March but did not
21 testify. I also testified in April of 2010.

22 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?**

23 I wish to offer Direct Testimony on Consolidation and its
24 impact on rates on a unified basis as contrasted with the
25 rebuttal testimony I filed on April 7, 2010.

26 **Q. WHAT BACKGROUND DO YOU HAVE IN A WATER UTILITY CASE?**

27 Beginning in the fall of 2008 through 2009, I spent over 4 months
28 as a member of the Sun City West Homeowners Association (P.O.R.A.
Water Rate Committee studying & preparing testimony for W-01303A
08-0227 & SW 01303A-08-0227, where we met weekly for over 4 months.
As stated above, I participated in a Commission Hearing in Sun
City West, and attended some of the hearings last March but did
not testify. I did testify in the hearings this April of 2010.

1 Q 1 WHAT VIEWPOINT DO YOU WISH TO EXPRESS AT THIS TIME?
2 ON THIS PROPOSED CHANGE IN POLICY?

3 I deem it a policy issue inasmuch as it defies the traditional
4 process in the calculation of rates predicated on the individual
5 districts invested capital in its singularly functioning system as
6 well as the revenues and expenses associated with the unique
7 characterizations of that district.

8 Q 2 DO YOU THINK "CONSOLIDATION" IS THE APPROPRIATE NAME FOR THIS
9 ISSUE?

10 No, I do not-in fact I would have characterized it as a classic
11 misnomer. Others have previously spoken of it in various terms,
12 classifying it an "Equalizer," Levelizer," or rate payer welfare.
13 In essence, it is a scheme to redistribute burdens predicated
14 on the confiscation of the prudently invested and functioning
15 districts to prop up the under-invested districts who-whether
16 by a variety of circumstances- find themselves in an adverse
17 fiscal position in terms of capital needs or operational
18 excesses for their size.

19 Q 3 WHAT COMPARABLE GAINS MIGHT ONE ANTICIPATE IN THE LEVELIZATION
20 OF THE RATE STRUCTURE?

21 Virtually none! Conceivably at the Commission level, it may be
22 able to eliminate an Administrative Judge and some attendant
23 personnel by virtue of fewer rate cases and perhaps a miniscule
24 reduction at the company level but that would be less likely.
25 Conversely, establishing a while new system and covering a massive
26 layer of districts simultaneously could trigger increased costs.
27 It could reduce the time spent by Commissioners but whether you
28 would ever reduce their compensation is problematic. In sum
total, any cost reduction of staff collectively, in a monopolis-
tic style of business, would more likely result in a trickle and
is unlikely to ever be seen by the rate payor. Potentially,
while it could appear to be time-savings for the A.C.C., the
greater depth and complexity of the case could offset it.
Significant wind-falls would be experienced by 3 districts, i.e.
Anthem, Havasu & Tubac but some would suffer and one particularly-
Sun City.

Q 4 CAN YOU BE MORE SPECIFIC ?

1 Yes, Tubac & Anthem in cases pending could experience a
2 doubling of their current rates, as was asserted by staff
3 at the 2/10/10 Rate Consolidation Seminar¹ whereas according
4 to Exhibit B from Rate Case # W-01303A-08-0227 on page 47 & 48
5 of Docket # 71410 under so-called "consolidation" would be
6 gifted with reductions of 47.74% for Anthem & 47.13% for Tubac
7 while Sun City would be saddled with a 136% increase. This
8 observation is similar to what Broderick expressed on lines 19-
9 of the same document, and on p. 49, lines 1-8.² Also, on lines
10 9-14 of page 49, PORA suggests their opposition to consolidation
11 and suggests that together with Sun City, they be left out of the
12 consolidation format. RUCO expresses its opposition because not
13 all districts were considered, in line 15-20 on p. 49.³ While
14 staff supports it in concept, not in the instant case and
15 acknowledged on p. 50 with Company Counsel that at least 10
16 deficiencies exist prior to rate consideration.⁴ Only one
17 party recommended consolidation, Magruder of Tubac.⁵

18 **Q 5 WHAT HAS PROMPTED THE INTEREST IN THIS APPROACH ?**

19 It is a hangover from the last rate case that concluded on
20 November 12, 2009. It is likely prompted by, and I can only
21 speculate, that it may have fermented into consideration
22 in that it is used sometimes with gas and electric utilities.

23 **Q 6 WOULD THAT NOT SUPPORT ITS CONSIDERATION.**

24 Absolutely not for gas and electric utilities are interconnected
25 in those cases, utilizing common production facilities whereas
26 water utilities in the instant case are not in that type operational
27 mode. They have their own invested facilities, unique to
28 their district and their own unique costs and revenues. While
some common labor and management has been allocated in accordance
with accepted accounting practices, production and distribution
in most instances remain separated. Some utility districts,
such as Sun City West, have been combating the arsenic
problem and our rate payors have absorbed the capital and
operational cost. Next door is Sun City & it does not have arse

- 29 (1) Staff @ Rate Consolidation Conference on 2/10/10
30 (2) Docket 71410, Schedule B, p 48 Broderick l. 19-25 on p.48, 1-8 of
31 (3) Ibid 2, p. 49, lines 1-8, PORA lines 9-14, RUCO 15-20
32 (4) Ibid 2, p. 50, lines 1-15
33 (5) Ibid 2, p. 50, lines 16-19

1 Now we learn that Tubac has arsenic, while Anthem is
2 facing fiscal problems so I can imagine that both would
3 be cheerleaders for consolidation or levelization of
4 rates since it would deposit their extra burdens on the
5 other districts. Fortunately for Tubac, they received a
6 one million dollar stimulus federal grant, something un-
known to Sun City West as we started shouldering the arsenic
costs a few years ago on the backs of our local rate payors.

7 **Q 7 WHAT OTHER ASPECTS MAKE LEVELIZATION DIFFICULT AMONG WATER**
8 **UTILITIES IN TERMS OF EQUITABLY RESPECTING DISTRICT'S**
9 **UNIQUE DIFFERENCES ?**

10 It does give one pause when suddenly a trade association
11 of 100 investor utilities (some as large as 400,000 meters)
12 signs up as an Intervener in a case devoted to 5 small
utility districts, other than to pursue their goal of
statewide water utility rate consolidation.

13 The main problem with water utility districts in Arizona is
14 the lack of homogeneous grouping for a singular rate setting.
15 The Water Infrastructure Finance Authority of Arizona illustrates
16 this fact in their latest survey of 2008, " **WATER & WASTEWATER**
17 **RESIDENTIAL RATE SURVEY for the state of ARIZONA.**" ⁶ On p. 9
18 they declare there are 426 entries for drinking water districts,
19 varying in rates from @\$4.64 month charge for Phoenix to \$201.78
20 monthly charge for Highland Pines. There are 133 waste water
districts with monthly rates that vary from \$2.00 in Tolleson
to \$80.00 in Kings Ranch. ⁷

21 The characteristic differences among water district is best
22 illustrated by their 3 major groupings; #1 Pricing of charges
23 with 7 subdivisions/⁸ #2 Cost factors used for rates with 11
subdivisions/⁹ # 3 Types of Ownership with 4 subdivisions.¹⁰

24 Thus with 3 major divisions, you add 22 subdivisions, ending
up with 25 different ways to characterize a district.

25 (6) Cover page of Water & Wastewater Survey

26 (7) Ibid # 6, p. 9 Cost variances of districts

27 (8) Ibid # 6, p. 5 & 6, Pricing systems

28 (9) Ibid # 6, p. 6 & 7, Cost factors for calculating rate

(10) Ibid #6, p. 9, Types of Ownership

1 Q 8 ARE THERE OTHER CHARACTERISTIC DIFFERENCES?

2 I'm sure there are more but I'll just mention 2 other differ-
3 ences in water districts that have major implications.

4 Sun City & Sun City West are built-out communities, that is
5 there is no potential for additional customers and as a
6 result its system is somewhat more static than those in
7 expansive areas. Also, costs & revenue tend to be quite static.
8 Additionally, the age of a system can make a significant
9 difference in capital demands. From the attached memo, you
10 can see the age of systems range from 25 years old to 64
11 years old, a span of age difference of 39 years. 11

12 That factor alone has huge expenditure implications.

13 Q. DO YOU AGREE WITH STAFF CONSOLIDATION PROPOSALS FOR
14 SUN CITY & SUN CITY WEST, AS SET FORTH ON PAGE 22, COMMENCING
15 WITH LINE 9?

16 Yes, I concur with the rejection of the possible consolidation
17 district by the Staff as shown at the bottom of page 23
18 commencing with line 21. I would, however, offer additional
19 reasons, though Michlick alludes to the possibility of
20 subsequent testimony of Elijah Abinah.

21 Q. WHAT INDEPENDENT STATEMENTS WOULD YOU OFFER.

22 While there is a proximity factor that could be favorable,
23 it is more than outweighed by other factors.

24 Q WHAT MIGHT THOSE FACTORS BE?

25 #1. The age disparity in the two systems. Sun City West
26 is 33 year old, while Sun City is 50 years old resulting in
27 in a deterioration rate that would not be on parallel paths.

28 In fact, in a 4/15/10 filing by Townsley & Broderick,
Townsley adopts the prior testimony of Christopher C. Buls,
stating, "Sun City has the oldest infrastructure of any of
the company's, and the infrastructure is at the point in in the
asset cycle where significant capital will begin to be invested.

12

(11) Memo from Bradley Cole of 1/22/09

(12) Remarks of Christopher Buls

1 Q. ARE THERE OTHER FACTORS?

2 Yes, a 2nd. would be a differential in system styles which
3 could impact rates. Sun City contracts out at least a portion
4 of its wastewater treatment to another entity, whereas in
5 Sun City West we have a complete treatment of all wastewater.

6 Q. ANY OTHER FACTORS?

7 Yes, a differential in special conditions. SCW has arsenic and
8 as a result it has made.....and continue to make, a substant-
9 ial commitment to accomodate this problem. On the other hand,
10 Sun City does not have arsenic.

11 Thus, the initial logic of pairing these two cities because
12 of proximity pales in light of greater disparities. Beyond that,
13 in my initial discussion of the subject I think I have set forth
14 a bevy of rational objections to the so-called-"consolidation."

15 Q. Do the more recent consolidation configuration improve over
16 last year.

17 When you rank the relative position, from lowest rate to highest
18 and then follow the change of their position under I., II., or III.
19 and you pay particular attention to the problem districts,
20 Anthem, Tubac and Mohave, as one tends to improve, the other
21 worsens. Likewise, the advantaged rate districts now would
22 play a disproportionate burden to improve the high rate
23 districts. Any way you slice it, it becomes "Rate payer
24 Welfare.

25 Q Does this conclude your testimony for now.

26 A YES

EXHIBITS

assumptions and decision points that must be considered.²²⁶ Mr. Broderick attached the results of one consolidation scenario to his prefiled rebuttal testimony. That scenario is attached to this Decision and incorporated herein as Exhibit B. Exhibit B includes all eight of the Company's water districts at the Company's requested revenues in the original application filed in this case, and at the present rates for the Sun City Water district. Exhibit B shows the typical 5/8 x 3/4 inch meter residential customer bill on a pre- and post- consolidation basis for each of the water districts, with a consolidated monthly basic service charge of \$15.59 and three tier commodity rates of \$1.50, \$2.50 and \$3.25. That scenario would result in the following total residential revenue and percentage shifts (in total changes net to zero) by district.²²⁷

District/Revenue shift increase/(decrease)	Rate increase/(decrease)
Anthem	(\$4.6 million) (47.74 %)
Tubac	(\$0.3 million) (47.13 %)
Havasus	(\$0.6 million) (42.90 %)
Agua Fria	(\$3.5 million) (17.75 %)
Sun City West	(\$1.3 million) (15.69 %)
Paradise Valley	\$0.3 million 2.95 %
Mohave	\$1.7 million 37.22 %
Sun City	\$8.4 million 136.00 %

Mr. Broderick stated that he experimented with the residential rate designs, but it did not change his conclusion that in order to achieve a total residential rate consolidation, the rates in the Sun City Water and Mohave Water districts would increase significantly, and that the major short term beneficiaries would be Anthem Water, Tubac Water, and Havasu Water districts, with the only largely unaffected water district being Paradise Valley Water.²²⁸ The Company's witness Mr. Townsley further addressed the difficulties and benefits of rate consolidation, and laid out a specific partial rate consolidation proposal that involves the levelizing of net plant investment per customer.

²²⁶ *Id.* at 5-6.

²²⁷ *Id.* at 7.

²²⁸ *Id.*

1 by means of a systems benefit charge to be assessed on the variable usage rate per gallon.²²⁹

2 Based on its analysis, the Company believes that with the magnitude of revenue shift that
 3 would be required, its customers are not yet ready for an eight district consolidation.²³⁰ The
 4 Company contends that ordering rate consolidation in this proceeding would be impractical, and
 5 could lead to unintended consequences, because at this time, there are more questions than answers,
 6 and to get the answers, data must be gathered, informed public input must be received, and difficult
 7 policy choices must be made. The Company believes that a subsequent parallel proceeding is needed
 8 to provide a forum for all parties, the public and the Commission to consider consolidation.²³¹

9 PORA states that it is unprepared to consider consolidation of rates.²³² PORA agrees with
 10 Staff that rate consolidation is a complex issue with both public and policy implications, that public
 11 outreach should be undertaken prior to consolidation, and that adequate notice of consolidation
 12 should be given to all affected ratepayers.²³³ PORA believes that Sun City West Water and Sun City
 13 Water districts have unique attributes which should entitle them to an option to not participate in rate
 14 consolidation if and when consolidation is implemented.²³⁴

15 RUCO states that it opposes consolidation of rates in this proceeding because only seven of
 16 the Company's thirteen water and wastewater districts are being considered in this proceeding, and
 17 because consolidation in this case would result in the inequitable spread of costs over some, but not
 18 all, of the Company's water districts.²³⁵ RUCO contends that while there may be good reasons for
 19 rate consolidation, the reasons should be thoroughly vetted on the record and then applied evenly to
 20 all the districts.²³⁶

21 Staff states that it supports rate consolidation, but urges the Commission to proceed with
 22 caution, and does not recommend consolidation in the instant case.²³⁷ Staff states that rate
 23 consolidation is a complex issue that has both public and policy ramifications which require careful

24 ²²⁹ *Id.* at 11-18.

25 ²³⁰ *Id.* at 8.

26 ²³¹ Company Brief at 52.

27 ²³² PORA Brief at 4.

28 ²³³ *Id.*

²³⁴ *Id.*

²³⁵ RUCO Reply Brief at 8-9.

²³⁶ *Id.* at 9.

²³⁷ Staff Brief at 20.

1 consideration in order to avoid any unintended consequences.²³⁸ Staff is also concerned that the
2 notice in this case was not adequate to notify affected ratepayers if consolidation were to be
3 accomplished in this proceeding.²³⁹

4 Staff's witness Mr. Abinah agreed with the Company's counsel that several issues need to be
5 addressed prior to rate consolidation, including:

- 6 • How to deal with different numbers of tiers and breakover points across districts;
- 7 • How to account for differing uses of water for residential irrigation across districts;
- 8 • Whether commercial rates should be consolidated at the same time as residential;
- 9 • How cost of service and returns by customer class should be affected;
- 10 • How public input can be maximized;
- 11 • How customers can be educated about the pros and cons of rate consolidation;
- 12 • How parties will participate in the public process;
- 13 • Whether to phase in or immediately implement consolidated rate structures;
- 14 • Whether wastewater rates should also be consolidated; and
- 15 • What economies of scale would be accomplished by consolidation.²⁴⁰

16 Only one party is recommending rate consolidation in this proceeding. Mr. Magruder
17 recommends that consolidated rates be implemented in the water districts at this time, and that in the
18 next Arizona-American rate case all other water districts be integrated into the consolidated rate
19 structure.²⁴¹

20 Staff states that if the Commission wishes to consider rate consolidation, this docket may be
21 left open for the sole purpose of rate design for consolidation purposes, with the possibility of a
22 consolidation of this docket with a future docket for the purpose of considering consolidating rates of
23 Arizona-American's water districts.²⁴² RUCO states, however, that it would not support reopening
24 this docket or the Company's next rate case docket for the purpose of applying a new rate design to
25

26 ²³⁸ *Id.*

27 ²³⁹ *Id.*

28 ²⁴⁰ Tr. at 892-97.

²⁴¹ Magruder Brief at 27; *see also* Magruder Reply Brief at 19-27.

²⁴² Staff Reply Brief at 5.

Water Infrastructure Finance Authority of Arizona



2008

Water and Wastewater Residential Rate Survey for the State of Arizona

**Water Infrastructure Finance Authority of Arizona
1110 West Washington, Suite 290
Phoenix, Arizona 85007
Telephone: 602.364.1310
Toll Free: 877.298.0425
Website: www.azwifa.gov**

Report Summary

INTRODUCTION

The Water Infrastructure Finance Authority of Arizona is pleased to provide this 2008 Residential Rate Survey for drinking water and wastewater systems. This survey provides data on the unit rates and total monthly charges assessed by utilities throughout Arizona for water consumed and/or wastewater generated. The 2008 survey presents data as of January 1, 2009; where information as of this date was not available, the most recent provided data was utilized.

This survey is limited only to the monthly base and usage charges assessed by Arizona utilities. No data was collected on other charges involved with the provision of water and wastewater service, such as connection charges, tap fees, impact fees, stand-by charges, late charges, etc. Nor is there any inclusion of sales taxes, sanitation charges, or other fees and surcharges that are sometimes included on a residential monthly water bill.

ARIZONA RATE STRUCTURES

There are many different rate structures for water and wastewater systems currently in effect in Arizona. The type of rate structure employed by a utility can have a significant impact on a customer's usage patterns and monthly bill for service. As noted in the American Water Works Association Manual M-1, an authoritative source for ratemaking throughout the United States, the most common types of rate structures include, but are not limited to:

Uniform Volume Charges - a single charge per unit of volume for all water used.

Declining Block Rates - a schedule of rates applicable to blocks of increasing usage in which the usage in each succeeding block is charged at a lower unit rate than in the previous blocks. Generally, each successive block rate is applicable to a greater volume of water delivery than the preceding block.

EXHIBIT 8. p. 5 & 6

Increasing Block Rates - a schedule of rates applicable to blocks of increasing usage in which the usage in each succeeding block is charged at a higher unit rate than in the previous blocks. Generally, each successive block rate may be applicable to a greater volume of water delivery than the preceding block. The intent of an increasing block rate is to encourage conservation by providing a financial disincentive to consumers for increasing amounts of water use.

Lifeline Rates - rates applicable to usage up to a specified level that are below the cost of service for the purpose of meeting the social goal of providing minimum water requirements to qualified customers at a below-cost price.

Off-Peak Rates - rates charged for usage during designated off-peak periods.

Seasonal Rates - higher rates that may be charged during the summer months when a system peak occurs, which requires facilities generally not needed to meet lower winter loads. These rates are based on the cost of service variations with respect to system seasonal requirements.

Fixed Monthly Charges - usually applicable to wastewater systems; involves the assessment of a single fixed charge for service regardless of the amount of water consumed or wastewater discharged. This charge can also be based several other factors, including the number of drainage fixtures, rooms, or amount of frontal footage of a property.

The type of rate structure implemented by a utility may have significant economic, social, and policy implications for the affected community. For example, a utility that charges for service based on Increasing Block rates will likely have a different total charge for a given level of usage than a utility that charges based on uniform rates. In addition to recovering sufficient revenues to fund operations, specific rate designs can be used to enforce policy goals, such as conservation (Increasing Block rates), system efficiency (Off-Peak rates), or assistance to needy or low-income ratepayers (Lifeline rates).

Furthermore, there are other factors within the type of rate structure implemented that may also have an impact on a customer's monthly charges. For example, some utilities choose to implement a high fixed charge and a lower volumetric rate, while other utilities do the opposite. Certain utilities provide a large allowance of gallons within the monthly minimum charge, others provide a limited allowance, and still others provide no usage allowance at all. On the wastewater side, some utilities charge a volumetric rate based on a "winter average", which sets a maximum usage level at the average of the customer's water usage during the winter months. Other utilities base wastewater charges on a straight percentage of total water volume, while still others use a fixed monthly charge.

Many variables effect the determination of a utility's cost of service and the ultimate rate it implements for its consumers. These variables can result in significantly different total costs and rates between even neighboring utilities. These variables include, but are not limited to:

- **Water Source** - Is the utility using ground water, surface water, or a combination? If ground water is used, what is the depth from which the water must be extracted? How extensive a treatment process is required to convert the raw water into potable water for

end users? Is the utility receiving water as a consequence of a federal project, i.e. dam, that would result in lower rates than if the utility had to incur the cost of constructing its own reservoir?

- **Transportation/Distribution** – Are the utility's customer base primarily rural or urban? Is the customer base densely populated or more widely disbursed?
- **System Age** – Is the system older, requiring more repair/replacement expenditures, or newer, installed to service the state's rapid growth of the past decade?
- **Economies of Scale** – Is the system larger and better positioned to take advantage of the economies of scale inherent in water and wastewater systems?
- **Grant Funding** – Is the utility eligible for state and federal grants to offset some of the costs of system repair and expansion?
- **Use of Tax Bonds** – Is the system able to, and does it choose to, finance a percentage of capital expenditures through the issuance of tax bonds (financed through property or sales taxes) as opposed to revenue bonds (financed through user rates)?
- **General Fund Subsidies** – (particularly applicable to municipal utilities) Are the utility's rates being used to offset a portion of the General Fund through contributions? To the contrary, are the utility's rates not covering its cost of service, thus requiring a subsidy from the General Fund in order to meet all expenses?
- **Return on Investment** – (particularly applicable to private sector utilities) What is the utility's allowed rate of return on investment?

Because of these fundamental cost differences between utilities, a high rate or a low rate does not necessarily reflect the efficiency of the utility's operation. Therefore, the results of this survey alone should not be used to judge the effectiveness of the operation of any specific utility. Instead, this survey will be useful by providing general comparisons between systems and communities.

SURVEY METHODOLOGY AND KEY FINDINGS

This is the first year the survey was available via the internet along with the traditional mail, fax and email versions. The survey was offered through SurveyMonkey, which is an online surveying tool started in 1999 that assists companies and individuals with surveying needs. The online version was very successful for its first year in operation. The online survey appeared to be especially helpful for the companies representing multiple utilities. As a result, 49 water utilities submitted 92 water surveys and 23 wastewater utilities submitted 28 wastewater surveys online. All other submissions were via mail, fax or email. Ease of accessibility is a key contributing factor to the success of a survey such as this, and WIFA will continue to explore new methods for distribution and collection of data.

ARIZONA WATER AND WASTEWATER RESIDENTIAL RATES - 2008

A total of 426 database entries for drinking water systems in Arizona are presented in this survey. (Some utilities have more than one entry due to seasonal rates or multiple geographic areas.) According to the data collected for these systems, the monthly water charges for 7,500 gallons of water consumption ranged from \$4.64 of the seasonal summer rates for the City of Phoenix to \$201.78 for the Highland Pines Drinking Water Improvement District. The average monthly charge for 7,500 gallons of water service was \$35.03, up 2.97% from the 2007 survey, and the median monthly charge was \$32.59, an increase of 5.20% over the 2007 survey rates.

A total of 133 database entries for wastewater systems in Arizona are presented in this survey. According to the data collected for these systems, the monthly wastewater charges for 5,000 gallons of wastewater ranged from a low of \$2.00 for the City of Tolleson to a high of \$80.00 for the Kings Ranch Unit II Treatment Plant. The average monthly charge for 5,000 gallons of wastewater service was up 7.45% from the 2007 survey to \$26.08, and the median monthly charge was \$23.00, an increase of 8.18% from the 2007 survey data.

This Report Summary overview section includes a number of tables and graphs that provide a statistical summary for both the Drinking Water Survey (Exhibits A-G) and the Wastewater Survey (Exhibit H & I). Both median and average data are provided by:

- Statewide Total
- Ownership Type
- Annual Revenues
- Number of Connections
- County Served

Data is also presented by Ownership Type for the various rate structuring methods used for Drinking Water Systems.

FOOTNOTE # 11

[Print Message](#) | [Close](#)

From : Joni.McGlothlin@amwater.com
To : jobobaz@cox.net
Cc : Joni.McGlothlin@amwater.com, c.ullman@juno.com, larry@lwoods.com
Subject : AAW MORE ANSWERS
Date : Fri, Jan 16, 2009 05:12 PM

Hi Bob,

Here is the second half of the answers to your questions straight from our director of Operations:

The following is the last piece of information for PORA. The age of our water and wastewater systems are as follows.

Tubac Water - 1958 and newer
Paradise Valley Water - 1946 and newer
Agua Fria Water - 1970 and newer
Sun City West Water - 1978 and newer
Mohave Water (BHC) - 1964 and newer
Mohave Wastewater - 1985 and newer
Havasut Water - 1970 and newer

Bradley J. Cole
Director of Operations, Central Arizona
Arizona American Water
15626 N. Del Webb Blvd.
Sun City, AZ 85351-1602

-I-

Testimony Summary for Paul G. Townsley:

Page 2

Mr. Townsley also will adopt the pre-filed direct testimony of Christopher C. Buls, as follows:

Arizona-American supports the implementation of an infrastructure improvement surcharge in the Sun City Water District and a pro forma adjustment for certain assurance fees related to transferring the Anthem water lease from Del Webb to Arizona-American Water Company.

Sun City Water has the oldest infrastructure of any of the Company's, and the infrastructure is at point in the asset life cycle where significant levels of replacement capital will begin to be invested. The qualifying assets would be limited to replacements of existing assets, including replacement mains, hydrants, meters (including AMR replacements), services, tanks and booster stations.